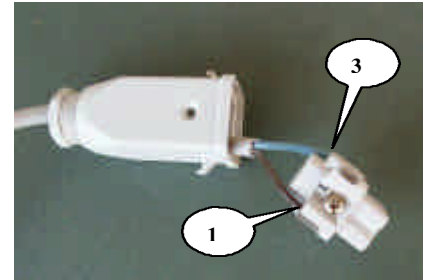


INSTALLATION INSTRUCTIONS – USER MANUAL

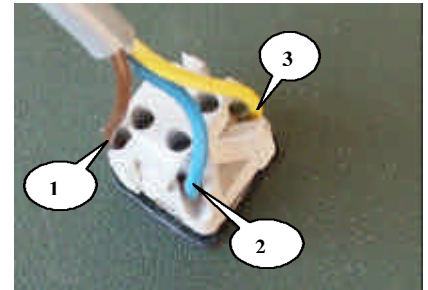
The RD1 is easy to install following the instructions detailed below.

In general, each trap is fired or released by a Pull-Cord, consisting of two wires carrying an electrical current. These two wires are touched together and the trap fires.

Remove the "Pull Button" from each of the two traps, then strip each wire to expose about ¼ " of conductor. Connect each pair to the supplied (**FEMALE**) ILME plugs as shown below. It doesn't matter which wire is connected to the plug connections (PINS 1 & 3)



Connect the Western Pull-Cord Head to the third supplied (**MALE**) ILME plug shown right, making sure to observe the correct connections. It is important to connect the "**Common**" wire to pin 1, and the two other wires to pins 2 & 3. (The "**HIGH / LEFT**" wire must be connected to PIN 3, with the "**LOW / RIGHT**" wire connected to PIN 2).



NOTE: If in doubt about the correct cable connections (1, 2 & 3) refer to the Skeet Head wiring diagram illustrated later in this manual.



Connect all three plugs to their respective sockets.

Turn "ON" both traps and test the connection. When you press the **HIGH** button the **LEFT** trap should 'fire'. If the **RIGHT** trap fires, reverse the wires connected to PINS 2 & 3 in the **PULL-CORD plug** OR... switch the two trap connection plugs?

Now test the **DOUBLE** feature. Press the **DOUBLES** button and both traps should fire simultaneously.

If you encounter problems with the operation of the Western Pull-Cord, check the wiring diagram as shown in Appendix I.

Now To Program the RD1. There are three features to choose from:

- US Skeet Mode** - When the Individual "High / Low" or "Doubles" button is pressed the trap or traps will fire immediately.
- International Skeet** - When any of the three buttons is pressed a random time delay varying between 0 and 3 seconds will be applied before the trap or traps are released.
- Sporting Delay** - Individual traps will release immediately when either the HIGH or LOW button is pressed, but on pressing the DOUBLES button one trap will release immediately and the other trap (the selected trap) will only release after the preprogrammed delay has expired.

US SKEET

As supplied the RD1 is set for this feature. When any of the three buttons (HIGH / LOW / DOUBLES) is pressed the trap(s) will fire immediately. In the case of doubles, both traps will release at the same time. If, the RD1 has been used for other purposes (Sporting Delay, Single Shooter or International Skeet) it can be RESET into **US Skeet Mode** (i.e. Basic Mode) by inserting the Programming Unit between the Western Pull-Cord and the RD1 then **PRESS** and **HOLD** the **RIGHT (LOW)** button for a minimum of two seconds – any preset time delays will be removed. Remove the Programming Unit and the RD1 is set to basic mode.

INTERNATIONAL SKEET

Insert the Programming Unit between the Western Pull-Cord and the RD1 as shown right

PRESS and **HOLD** the **LEFT (HIGH)** button on the Western Skeet Head for at least 2 seconds.



← (This will switch the RD1 into International Mode.)

Remove the Programming Unit then reconnect the Western Pull-Cord and test.

When any of the buttons, (**HIGH / LOW /DOUBLE**) is pressed, a random delay of between 0 and 3 seconds will be applied before the selected trap or traps are released.

(To remove this feature, i.e. revert to immediate release, insert the Programming Unit between the Western Pull-Cord and the RD1, then **PRESS and HOLD** the **RIGHT (LOW)** button on the Western Skeet Head for at least 2 seconds. This will **RESET** the RD1 to zero i.e. US Skeet – basic mode.)



If you would like a quick way of swapping, back and forth, between **US Skeet** & **International Skeet**, without having to keep re-programming the RD1 using the Programming Unit, you can use the **RD1-IS** (International Skeet Selection Switch)

← This can be inserted in-between the Western Pull-Cord and the RD1 as shown to the left side here. By the simple movement of the switch (right picture) you can switch from one mode to the other in a couple of seconds.



SPORTING CLAYS DELAY

Insert the Programming Unit between the Western Pull-Cord and the RD1 as shown to the right. Now decide which trap you want to delay – **RIGHT or LEFT**.

Whichever trap you choose, the procedure is basically the same. Take the Western Skeet Head and hold down the button corresponding to the trap you want to apply the delay to. While doing this, momentarily push the other button, then let both buttons up. This sequence informs the RD1 which trap to delay. (Thumb button = delay trap.)

Use your thumb to hold down the “delay” trap button then momentarily press the other.



Here, the **LEFT** trap is selected, note the thumb holding down the **LEFT** button while the finger “**PULSES**” (press and releases), the **RIGHT** button.

Over here, the **RIGHT** trap is selected. Note the thumb holding down the **RIGHT** button while the finger “**PULSES**” (press and releases), the **LEFT** button.



NOTE: If the RD1 was previously used to set a trap “delay time” on either trap, the above procedure will “swap” the “already programmed delay” to whichever trap you just chose. Any new changes to the delay time will apply to that “newly” selected trap.

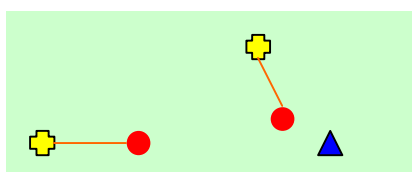
Press the **DOUBLES** button on the Western Skeet Head and note the timing between the trap releases. (If this is a unit that was previously **RESET**, there will be no difference and both traps will release at the same time.)

To **INCREASE** the time delay on the pre-selected trap, **"Pulse"** the **LEFT or HIGH** button. To **DECREASE** the time delay **"Pulse"** the **RIGHT or LOW** button. Each pulse will add or subtract $\frac{1}{4}$ of a second to the selected trap's release delay. **NOTE:** If the **RIGHT or LOW** button is held for at least **two** seconds, the RD1 will interpret this as a **RESET** command and remove any delay from the pre-selected trap i.e. **RESET** the RD1 to ZERO delay.

To check your setting, press the **DOUBLES** button and note the difference of release times. The "non-selected" trap should release immediately, while the selected trap will delay by whatever time you set. If this time delay is too short, **"Pulse"** the **LEFT or HIGH** button two or three more times. Check again, press the **DOUBLES** button and observe. Keep repeating this procedure until you have the exact delay you require. If you go too far, you can **"Pulse"** the **RIGHT or LOW** button to reduce the delay by $\frac{1}{4}$ of a second on each pulse. When you are satisfied with the delay, remove the Programming Unit, reconnect the Western Pull-Cord and your trap release sequence is now set and will be the same on each **DOUBLE** release. The individual traps will still release immediately when the corresponding release button is pressed (**HIGH or LOW**), but when the **DOUBLES** button is pressed the selected trap will always release later than the non-selected trap. This will not change until the Programming Unit is used again to change the delay or to reset the RD1 to basic mode.

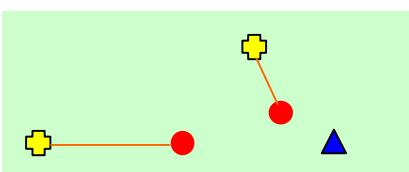
✚ = TRAP ● = TARGET ▲ = SHOOTING STATION

Both Traps Release Together



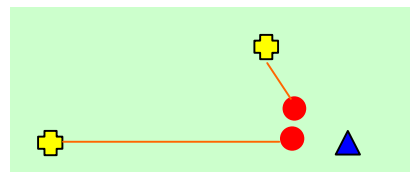
Targets arrive as a following pair

Delay "Near" Trap by ONE second



Targets come closer together

Delay "Near" trap by TWO seconds



Targets arrive at same time


The above diagram illustrates how targets can be adjusted to arrive at the shoot-zone at the same time. In this example, zero, one and two second intervals are shown, but with the RD1 allowing $\frac{1}{4}$ second time increments, up to five seconds, precise settings of targets can be easily achieved.


SINGLE SHOOTER TIME DELAY

The RD1 can be programmed to "add" an additional delay to the release of both targets in any of the modes.

If a single shooter wants to shoot by himself and "Pull" his own targets, a delay can be introduced between him pressing the release button (**HIGH , LOW or DOUBLE**) and the actual release of the selected trap(s). This allows time for him to mount his gun before the targets are released.




To use the **"Single Shooter Delay"** requires the purchase of an **RD1-SS "Single Shooter Switch"** which is inserted  between the Western Pull-Cord and the RD1.

To set the **"Single Shooter Delay"**, the **Programming Unit** has to be inserted between the Western Pull-Cord and the **RD1-SS** as shown to the right. 

Using the buttons on the Western Pull-Cord as before, the **"Single Shooter Delay"** can be programmed into the RD1. Press the **LEFT or HIGH** button to increase the delay by 1 second, or press the **RIGHT or LOW** button to decrease the delay by 1 second. Minimum delay is 3 seconds, maximum 5.

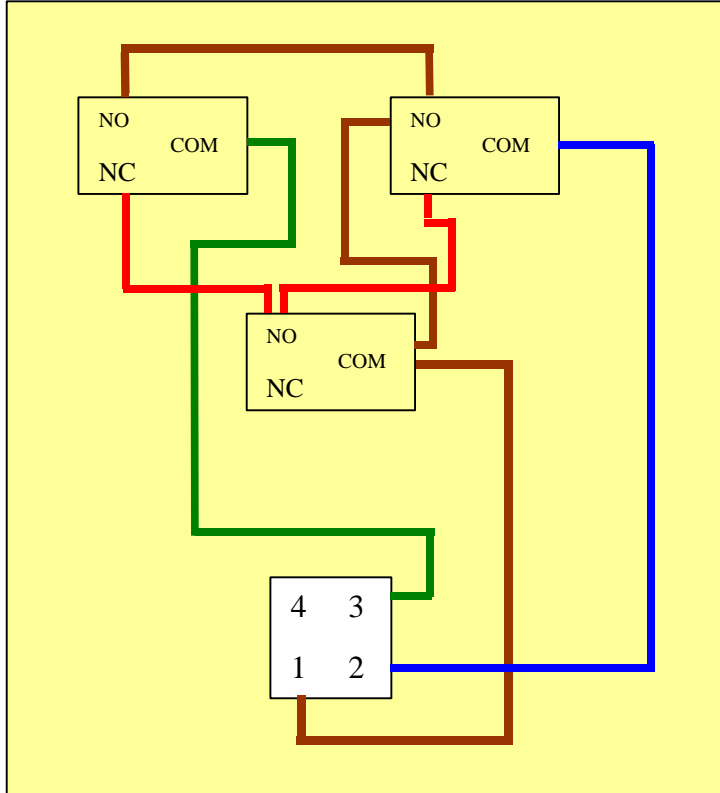
Holding the **RIGHT or LOW** button for two seconds or more, resets the **"Single Shooter Delay"** to zero.

NOTE: The RD1-SS has a switch mounted at the bottom allowing the **"Single Shooter Delay"** to be turned ON or OFF, so that a group of shooters can disable the delay, and release targets at the normal timing. 

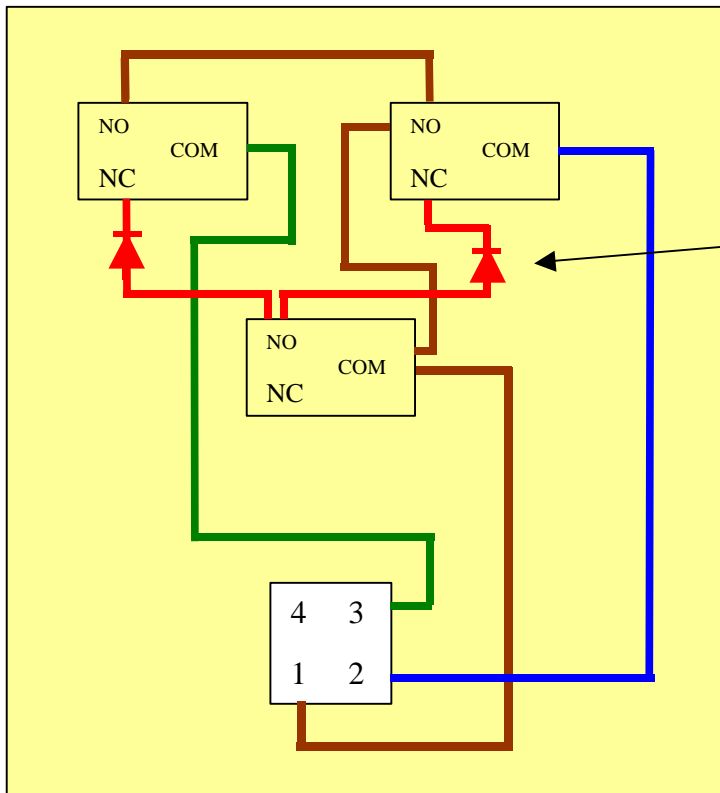
Note: If the Single Shooter Selection switch is set to "Normal or No Delay" the programming commands will be interpreted as if programming the Sporting Clay Delays as detailed above.



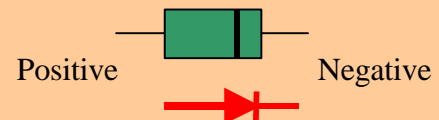
Appendix 1 Western Skeet Head Wiring Configuration.



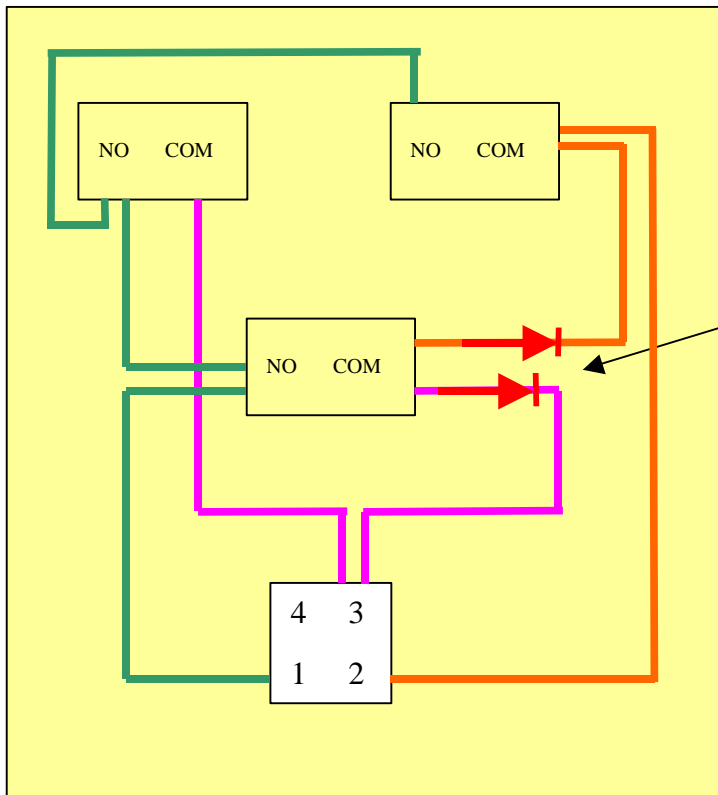
Laporte Modified Skeet Head



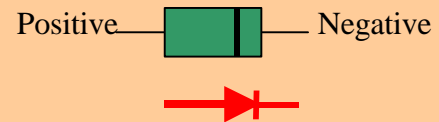
NOTE: The addition of two diodes to prevent back signal. These are not required for the operation of the RD1 – BUT, if they are installed make sure the polarity is as shown here.



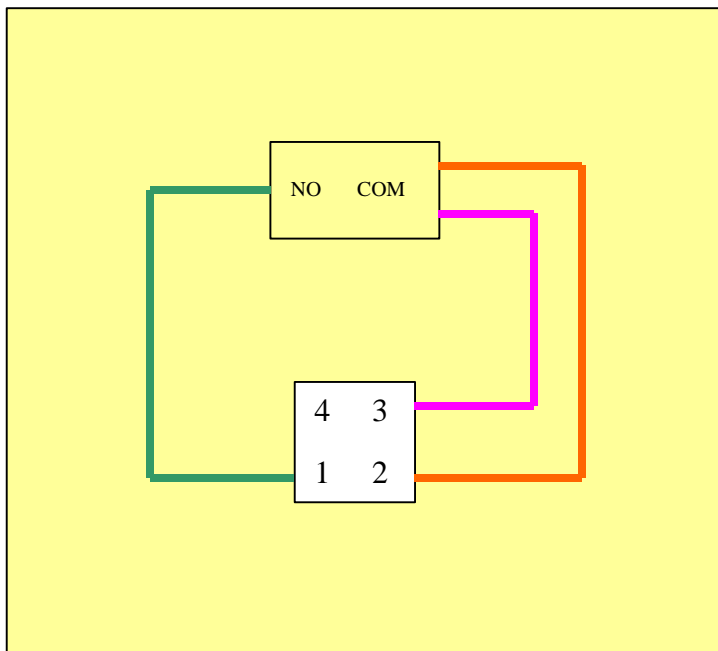
ALTERNATIVE USING THREE PRESS BUTTONS (Open or Closed)



NOTE: The addition of two diodes to prevent back signal. Make sure the polarity is as shown here.



USING ONE PRESS BUTTON TO FIRE BOTH TRAPS (NO INDIVIDUAL FIRE)



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